EXHIBIT 1.5 REQUIRED EXPERTISE FOR CULTURAL RESOURCES ACTIONS

The tables below outline the types of expertise that are required for actions under the Section 106 Programmatic Agreement (Table 1) and for archaeological activities (Table 2).

TABLE 1: PQS LEVELS REQUIRED FOR ACTIONS TAKEN UNDER SECTION 106 PA

ACTION TAKEN UNDER SECTION 106 PA	PQS Level	Arch. Crew Member A	Lead Arch. Surveyor	Co-Principal Investigator Prehistoric Archaeology	Co-Principal Investigator Historical Archaeology	Principal Investigator – Prehistoric Archaeology	Principal Investigator – Historical Archaeology	Architectural Historian	Principal Architectural Historian
Screen an undertaking			V	√ +	√ +	√ +	√ +	√ +	√ +
Set APE in consultation with Project Engineer			√ +	√ +	√ +	√ +	√ +	√ +	√ +
Determine archaeological property types in Section PA Attachment 4 as exempt from evaluation		√	/	✓	✓	✓			
Determine architectural & historical property types 2, and 3 exempt from evaluation in Section 106 PA Attachment 4			√	√	√	√	✓	✓	✓
Determine architectural and historical property typ 5, and 6 exempt from evaluation in Section 106 PA Attachment 4								✓	√
Conduct archaeological Extended Phase I (prehistor	ric)			√		✓			
Conduct archaeological Extended Phase I (historical	al)				✓		✓		
Evaluate historical archaeological site (excavation required)	<u>not</u>				*+		√ +		
Evaluate prehistoric archaeological site				*		1			
Evaluate historical archaeological site (excavation required)					*		√ +		
Evaluate Native American TCP						✓			
Evaluate non-Native American TCP									√ +
Evaluate built environment feature (ditches, roads, trails, RR grades)					*+		√ +	*+	√ +
Evaluate vernacular landscapes							√ +	*+	√ +
Evaluate buildings, structures (including bridges), objects, and districts								✓	√

January 2004 rev: 01/07 Page E-1.5 - 1

ACTION TAKEN UNDER SECTION 106 PA	Arch. Crew Member A	Lead Arch. Surveyor	Co-Principal Investigator Prehistoric Archaeology	Co-Principal Investigator Historical Archaeology	Principal Investigator – Prehistoric Archaeology	Principal Investigator – Historical Archaeology	Architectural Historian	Principal Architectural Historian
Evaluate designed landscapes (parks, formal gardens, etc.)							√	✓
Evaluate historic-era sites (battlefields, treaty-signing sites, internment camps, etc.)						√ +	√ +	√ +
Establish ESA for archaeological site (prehistoric or historical)			1	✓	✓	✓		
Establish ESA for non-archaeological property					√ +	√ +		√
Conduct archaeological data recovery (prehistoric site)			*		✓			
Conduct archaeological data recovery (historical archaeological site)				*		✓		

Key: ≺ = May assist in archaeological surveys and excavations under the direction of a qualified Lead

Archaeological Surveyor or higher PQS level(s) qualified to perform task

* = PQS level(s) qualified to perform task with review from higher level

+ = Interdisciplinary collaboration <u>strongly</u> recommended

TABLE 2: PQS LEVELS REQUIRED FOR ARCHAEOLOGICAL ROLES

Table indicates what roles the different PQS staff levels are qualified to play in different types of archaeological studies.

	Acceptable Qualification Levels for Each Role by Study Type										
		Extended	Extended	Site Site		Data	Data				
Role Played		Phase I -	Phase I -	Evaluation	Evaluation	Recovery -	Recovery -	Construction			
in Study	Survey	Prehistoric	Historical	Prehistoric	Historical	Prehistoric	Historical	Monitoring			
Crew	1, 2,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P, 3H,			
Member	3P, 3H,	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	4P, 4H			
	4P, 4H										
Crew Chief	2, 3P,	2, 3P, 3H,	2, 3P, 3H,	2, 3P, 3H,	2, 3P, 3H,	2, 3P, 3H,	2, 3P, 3H,	2, 3P, 3H, 4P,			
	3H, 4P,	4P, 4H	4P, 4H	4P, 4H	4P 4H	4P, 4H	4P, 4H	4H			
	4H										
Principal	2, 3P,	3P, 3H, 4P,	3H, 4H	4P	3H*, 4H	3P*, 4P	3H*, 4H	3P, 3H, 4P,			
Investigator	3H, 4P,	4H				7		4H			
	4H					7					
Primary	2, 3P,	3P, 3H, 4P,	3H, 4H	4P	4H	4P	4H	3P, 3H, 4P,			
Author of	3H, 4P,	4H				/		4H			
Report	4H										
Secondary	1, 2,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P,	1, 2, 3P, 3H,			
Author of	3P, 3H,	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	3H, 4P, 4H	4P, 4H			
Report	4P, 4H										
Contract	3P, 3H,	3P, 3H, 4P,	3P, 3H, 4P,	3P, 4P	3H, 4H	3P, 4P	3H, 4H	3P, 3H, 4P,			
Coordinator	4P, 4H	4H	4H					4H			

Key

- 1 = Archaeological Crew Member
- 2 = Lead Archaeological Surveyor
- 3P = Co-Principal Investigator Prehistoric Archaeology
- 3H= Co-Principal Investigator Historical Archaeology
- 4P = Principal Investigator Prehistoric Archaeology
- 4H = Principal Investigator Historical Archaeology
- * = PQS level(s) qualified to perform task with review from higher level

Example: Only individuals certified as a Co-Principal Investigator (Historical) or Principal Investigator (Historical) are qualified to serve as Principal Investigator at data recovery excavations at a historic archaeological site. Asterisk indicates that the Co-PI should be overseen by a PI.

January 2004 rev: 01/07 Page E-1.5 - 3